

METHOD AND APPARATUS FOR MANAGING A LOCK FOR AN OBJECT

Abstract of the Disclosure

An innovative compound lock method is provided that does not reduce the processing speed attained along a frequent path. When no thread is locking an object (1), a value of 0 is stored both in a lock field and in a contention bit. Then, when a specific thread locks an object (light lock), the identifier of the thread is stored in the lock field (2). If any other thread attempts to acquire a lock before the thread designated by the thread identifier unlocks the object, SPECIAL is stored in the lock field (5), and the process is returned to (1). If a different thread attempts to acquire a lock before the designated thread unlocks the object, this causes a contention to occur in the light lock mode, and a contention bit is set to record it (3). Thereafter, when the lock mode is shifted to the fat lock mode, the contention bit is cleared (4), and if possible, the process is shifted from (4) to (1).